1P

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,163	04/18/2001	William Simpson-Young	169.2020	7407

5514 7590 06/05/2006

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
LIN, WEN TAI	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/836,163	SIMPSON-YOUNG ET AL.	
	Examiner	Art Unit	
	Wen-Tai Lin	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17 and 37-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17 and 37-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-17 and 37-40 are presented for examination.

2. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.

Claim Rejections - 35 USC § 102

3. Claims 1-11, 13-15, 17 and 37-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Gibbs[U.S. Pat. No. 6963784].

4. As to claim 1, Gibbs teaches the invention as claimed including: a method of automatically establishing a desired communication between an originating device and a target device, said originating device and said target device each having an associated profile [e.g., col.1, lines 53-67; col.9, lines 33-48; col.10, lines 7-28; note that the self-describing data (SDD) structure holds the capabilities and the device type of an associated device], said method comprising steps of:

(i) determining a profile compatibility between said originating device and said target device [e.g., determining the types of AV device];

(ii) establishing said desired communication, if said profile compatibility between said originating device and said target device is not found, between said originating device and said target device by incorporating at least one additional device [e.g., a gateway], said at least one additional device having an associated profile, said incorporation forming linked pairs of devices among said originating device, said target device and said at least one additional device, whereby said incorporation establishes a profile compatibility between each said linked pair of said devices [e.g., col.8, line 22 – col.9, line 20; i.e., if the target device is a legacy base node, it would require a FAV node acting as a gateway. For example device 304 of Fig.3 is a legacy base node which requires device 301 to act as a gateway in order to communicate with device 302 or 303]; and

(iii) establishing said desired communication, if a profile compatibility between said originating device and said target device is found, said establishing being directly between said originating device and said target device [e.g., Figs.2-5; col.11, lines 4-46; note in the example of Fig.2 devices 201 and 202 are connected peer-to-peer because they both are of compatible IAV type],

wherein said incorporation establishes a profile compatibility between each said linked pair of said devices; and each of the steps (i), (ii), and (iii) is performed by at least one of the originating device, the target device, and the at least one additional device [note that when a new device is added to the system, it is automatically registered to the system with its capability and device type, and supply a uploadable DCM to a FAV device to which a referenced handler is made. Thus when a device A wishes to communicate with another device B, A could query B for

its capability via B's SDD and if B is not of directly compatible type, A then further query the registry for a referenced handler such that A could communicate with B via the handler].

5. As to claims 2-3, Gibbs further teaches that said incorporation comprises steps of:

(a) communicating, by one of said originating device and said target device [e.g., nodes 303 or 402 of Fig.5 communicating to node 302], to a first additional device [e.g., 301], thereby forming linked device pairs among said originating device, said target device and said at least one additional device;

(b) establishing said desired communication, if profile compatibility is established between each said linked pair of devices;

(c) communicating, by one of said originating device, said target device and said first additional device, if said profile compatibility is not established between each said linked pair of devices, to a second additional device, thereby forming linked device pairs among said originating device, said target device, said first and said second additional devices [e.g., node 401 communicates to node 302 via 501 and 301, wherein the two FAV nodes may each provide certain DCM functionality to the service (see e.g., col.13, lines 38-49 and col.14, line 49 – col.15, line 3; and Figs. 12-13)].

6. As to claim 4, Gibbs further teaches that each said device comprises one of a device or a service [i.e., the FAV nodes are devices but may also be viewed as providing DCM services].

7. As to claims 5-9, since the features of these claims can also be found in claims 1 and 3-4, they are rejected for the same reasons set forth in the rejection of claims 1 and 3-4 above.

8. As to claim 11, Gibbs further teaches that said message comprises at least one of a command and a data value [col.8, lines 63-66; col.9, lines 49-61].

9. As to claims 10, 13-15, 17 and 37-39, since the features of these claims can also be found in claims 1-9 and 11, they are rejected for the same reasons set forth in the rejection of claims 1-9 and 11 above.

10. As to claim 40, Gibbs further teaches requesting means for requestng the at least one additional device for format conversion of data from the target device, wherein said second establishing means established the communication to receive the converted data from the at least one additional device [e.g., col.2, lines 10-15; col.10, lines 30-41].

Claim Rejections - 35 USC § 103

11. Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbs [U.S. Pat. No. 6963784], as applied to claims 1-11, 13-15, 17 and 37-40 above, further in view of Zintel [U.S. Pat. No. 6779004].

12. As to claims 12 and 16, Gibbs does not specifically teach that said messaging protocol is the Extended Markup Language (XML).

However, in the same field of endeavor Zintel teaches that XML can be used as messaging protocol [Zintel: col.2, line 64 – col.3, line 8].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form Gibbs's messages in XML because it is well known that XML supports structured information with designated tags that can be used for extracting command and its associated parameters that are embedded in Gibbs's message.

13. Applicant's arguments with respect to claims 1-17 and 37-40 on 4/5/2006 have been considered but they are not deemed to be persuasive.

Specifically, Applicant argues that Gibbs does not teach claimed steps (i), (ii), and (iii), which is performed by at least one of the original device, the target device, and the at least one additional device.

14. The examiner respectfully disagrees with Applicant's arguments. To provide a clearer understanding about Gibbs's teaching, a brief summary using Figs. 3-4 as examples is given below:

The HAVI architecture as disclosed by Gibbs shows a particular application in home network using IEEE 1394 as interconnection medium, wherein all physical devices are connected to the IEEE 1394 as in bus topology, however they can be logically interconnected among themselves as shown in Figs. 1-5. These interconnection examples are merely results of

certain compatibility arrangement after each device is properly registered with the system. For example, device 304 of Fig.3 has to use device 301 as a gateway in order to talk to devices 302 and 303. To illustrate further: when device 304 is newly added to the system, it is automatically queried for its capability and the device characteristics, which is then recorded in a database (or registry). Because 304 is a BAV type device, it could not directly talk to devices 302-303, it first uploads from within its ROM a DCM to FAV device 301, which is designated as a handler to provide necessary command set and format for device 304 to communicate with the rest of the network node. Other devices are able to query the registry to locate a device and then use the handler (device 301) to interact with device 304. Device 304 is also associated with a SDD (self-describing data, which is equivalent to a device profile) so that other device objects may directly query or use discovery process to find device 304 as a potential target device.

Now use Fig. 4 as an example. Suppose device 402 wishes to communicate with device 401, it first obtains the SDD of device 401 (equivalent to step i) and finds out that they are compatible devices, thus a direct connection is made between the pair (equivalent to step iii). Further, if device 402 wants to communicate with device 303, which is found to be incompatible via the SDD. After querying the registry for its device 303's handler, the pair is connected via additional device 303 (equivalent to step ii). All the above steps can be taken by the originating device.

For at least the above reasons, it is submitted that Gibbs reads on the claims.

15. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the contest of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

May 24, 2006

Wen-Tai Lin
5/24/06